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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO. |
| 10/589,131   | 08/11/2006  | Yuki Yanagisawa      | 294885US0PCT              | 5709             |
| 22850  | 7590        | 03/17/2009           |                           |                  |
| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.<br>1940 DUKE STREET<br>ALEXANDRIA, VA 22314 |             |                      | EXAMINER<br>MRUK, BRIAN P |                  |
|  |             |                      | ART UNIT                  | PAPER NUMBER     |
|  |             |                      | 1796                      |                  |
|  |             |                      | NOTIFICATION DATE         | DELIVERY MODE    |
|  |             |                      | 03/17/2009                | ELECTRONIC       |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/589,131 | <b>Applicant(s)</b><br>YANAGISAWA ET AL. |  |
|                              | <b>Examiner</b><br>Brian P. Mruk     | <b>Art Unit</b><br>1796                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-6, 8-10, 12, 17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-6, 8-10, 12, 17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office action is in response to Applicant's amendment filed December 9, 2008. Applicant has amended claims 2, 3, 5, 6, 8-10, 12, 17, 19 and 20. Claims 1, 7, 11, 13-16, and 18 have been cancelled. Currently, claims 2-6, 8-10, 12, 17, 19 and 20 remain pending in the application.
2. The text of those sections of Title 35 U.S. Code not included in this action can be found in the prior Office action, Paper No. 20080605.
3. The objection of claims 9 and 13 is withdrawn in view of applicant's amendments and remarks.
4. The rejection of claims 1-8 and 14-16 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Raemdonck et al, EP 299,575, is withdrawn in view of applicant's amendments and remarks.
5. The rejection of claims 2-6, 8, 10, 12, 17, 19, and 20 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Antwerpen et al, U.S. Patent No. 5,607,618, is maintained for the reasons of record.

## **NEW GROUNDS OF REJECTION**

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 9 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Antwerpen et al, U.S. Patent No. 5,607,618.

Antwerpen et al, U.S. Patent No. 5,607,618, discloses a detergent additive comprising a copolymer having a molecular weight of 50,000 to  $20 \cdot 10^6$  that contains 40-70% by weight of 2-acrylamido-2-methylpropane-3-sulfonic acid (see abstract and col. 3, lines 17-28). It is further taught by Antwerpen et al that the composition is pulverulent (see col. 3, lines 32-35), that the pH of the composition is 7-10 (see col. 4, lines 65-67), and that the composition further contains anionic surfactants (see col. 3, lines 41-54), sequestering agents, such as sodium silicate (see col. 4, lines 24-33), washing alkalis,

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such as silicates, phosphates, and carbonates (see col. 4, lines 45-49), and bleaching agents, such as perborates and percarbonates (see col. 4, lines 36-44), per the requirements of the instant invention. Specifically, note the Example in columns 5 and 6. Therefore, instant claim 9 is anticipated by Antwerpen et al, U.S. Patent No. 5,607,618.

In the alternative that the above disclosure is insufficient to anticipate the above listed claims, it would have nonetheless been obvious to the skilled artisan to produce the claimed composition, as the reference teaches each of the claimed ingredients within the claimed proportions for the same utility.

### ***Response to Arguments***

9. Applicant's arguments filed December 9, 2008 have been fully considered but they are not persuasive.

Applicant argues that Antwerpen et al, U.S. Patent No. 5,607,618, does not teach or suggest in general an organic polymer having an average molecular weight of 2,500,000 or more. However, the examiner respectfully disagrees. Specifically, the examiner asserts that Antwerpen et al clearly discloses that their copolymers having high molecular weights are in the order of 3 times  $10^6$  to 20 times  $10^6$  (i.e. 3 million-20 million; see col. 3, lines 24-28 and col. 7, lines 30-33), as required in the instant claims.

Applicant further argues that Antwerpen et al does not teach or suggest in general an organic polymer containing at least one monomer selected from the group consisting of 2-acrylamide-2-methylpropanesulfonic acid and styrenesulfonic acid.

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However, the examiner respectfully disagrees. Specifically, the examiner asserts that Antwerpen et al clearly discloses that their copolymer contains 40-70% by weight of 2-acrylamido-2-methylpropane-3-sulfonic acid (see abstract and col. 3, lines 17-22), as required in the instant claims. Furthermore, note that the attached non-patent literature Chem Blink, "<http://www.chemblink.com/products/15214-89-8.htm>", properties of 2-acrylamide-2-methylpropanesulfonic acid, discloses that the molecular formula and CAS registry number for 2-acrylamide-2-methylpropanesulfonic acid are  $C_7H_{13}NO_4S$  and 15214-89-8. Also note that the attached non-patent literature Science Lab, "<http://www.sciencelab.com/page/S/PVAR/10408/SLA1903>", properties of 2-acrylamido-2-methyl propanesulfonic acid, discloses that the molecular formula and CAS registry number for 2-acrylamide-2-methylpropanesulfonic acid are  $C_7H_{13}NO_4S$  and 15214-89-8. Therefore, the examiner asserts that the monomer 2-acrylamido-2-methylpropane-3-sulfonic acid disclosed in Antwerpen et al clearly meets the monomer 2-acrylamide-2-methylpropanesulfonic acid required in the instant claims, since these monomers have the same molecular formula and CAS registry number, and thus, are the same monomer.

Applicant further argues that Antwerpen et al does not teach or suggest in general an organic polymer having spinnability. However, the examiner respectfully disagrees. Specifically, the examiner asserts that applicant discloses on page 15, lines 5-8 of their specification, that spinnable organic polymers include polymers or copolymers containing one or more monomers selected from the group consisting of 2-

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acrylamide-2-methylpropanesulfonic acid, which is clearly disclosed by Antwerpen et al, U.S. Patent No. 5,607,618.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Mruk whose telephone number is (571) 272-1321. The examiner can normally be reached on Mon-Thurs (7:00 AM-5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian P Mruk/  
Primary Examiner, Art Unit 1796

Brian P Mruk  
March 11, 2009

Brian P Mruk  
Primary Examiner  
Art Unit 1796